LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES

OFFICE OF FISHERIES
INLAND FISHERIES SECTION

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

POVERTY POINT RESERVOIR

LAKE HISTORY & MANAGEMENT ISSUES

CHRONOLOGY

DATE – May 9, 2006
Prepared by Ryan Daniel, Biologist Supervisor, District # 2

Updated January, 2009 by R. Daniel

Updated March, 2013 by R. Daniel

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LAKE HISTORY

GENERAL INFORMATION

Date reservoir formed
Construction began in 1995, impounded Jan. 2001, opened to public April 21, 2003

Impoundment
Owners – State of Louisiana

Purposes for Creation - State Park and recreation primarily, other named purposes include potential water usage, groundwater protection, economic development, and retirement development.

Size
2,785 acres

Watershed
Approximately 4,000 acres, mostly agricultural and roadside ditches. Lake is filled by pumping from Bayou Macon with a 36" and 18" pump.

Pool stage
83.2 ft. MSL

Parish/s located
Richland

Border waters
Bayou Macon runs along eastern border with spoil bank forming the boundary.

Spillway width
80 ft.

Drawdown description
Spillway -
Gate size - 17 ft. wide x 11 ft. tall tainter gates
Number of gates - 4
Condition – New

Who controls
Justification for a drawdown must be approved by Secretary of State Parks, who will make a request to the Secretary of DOTD. For a fisheries management drawdown, the Secretary of LDWF would make the request in writing to State Parks. The letter from LDWF will indicate the date for gate opening and the rate of drawdown desired for management purposes.

LAKE AUTHORITY

The Department of Culture, Recreation, and Tourism is the authority for regulations and management of Louisiana State Parks, including Poverty Point Reservoir.

Association

Poverty Point Reservoir District: The district was created for the purpose of the development of the wealth and natural resources by the conservation of soil and water for agricultural, commercial, recreational, industrial, and sanitary purposes. Duties relevant to Poverty Point include issuing permits for pier construction and making recommendations to State Parks.
Members – see **Appendix I** for a list of members
Contact information – included in **Appendix I**.

Authorization

Members appointed by the Governor from list of nominees submitted by the governing authority of Richland, Madison, East and West Carroll Parishes. The district is considered a component unit of the State because the State exercises oversight responsibility in that the Governor appoints the board members and public service is rendered within the State's boundaries. Created by R.S. 38:3087.1

ACCESS

map with locations included in **Appendix II**.

Boat docks

State Park North facility: concrete ramp can accommodate up to 5 boat trailers at once. Asphalt parking lot with 100 vehicles with trailer capacity. State Park South facility: concrete ramp can accommodate up to 5 boat trailers at once. Asphalt parking with 75 vehicles with trailer capacity. Overflow parking area available.

Piers

Fishing pier located at north State Park facility, adjacent to boat ramp and marina. Bank fishing allowed at both north and south facilities

State/Federal facilities

Poverty Point Reservoir State Park: facilities located along LA. Hwy 17, north of Delhi, Louisiana. Web address: http://www.crt.state.la.us/parks/ireservoir.aspx

- North Entrance: boat launch, fishing pier, fish cleaning station, marina, swimming area.
- South Entrance: boat launch, fish cleaning station, camping, nature trail.

Fishing Structures

Nearly 50 large brush piles were constructed in lake bottom prior to impoundment to increase angler success. These piles are scattered throughout the lake and most are completely submerged and unmarked.

SHORELINE DEVELOPMENT

State Park Facilities
Poverty Point Reservoir State Park has facilities on north and south end of lake (mentioned above).

Residential
Homes are mainly restricted to the east and west sides of lake. Man-made peninsulas were constructed on east side of lake for real-estate development (see **Appendix II**). All houses on the east side are part of a gated community.

PHYSICAL DESCRIPTION OF LAKE

Shoreline length
Approx. 10 miles

Timber type
Lake bottom mostly comprised of agricultural fields, some dead hardwood and cypress standing along old oxbows and near marina. No significant amount of timber is found in the area around lake.

Average depth
7.4 ft.

Maximum depth
28 ft. in oxbow areas

Natural seasonal water fluctuation
Normally no greater than 2.5 ft.

EVENTS / PROBLEMS

Water Level
Pool stage water level is maintained by State Parks through the use of two large surface water pumps in the adjacent Bayou Macon. Pumping is normally required during mid to late summer. Two wells also provide ground water source. Currently, there are no irrigation restrictions for Poverty Point or Bayou Macon. This is an issue that State Parks recognizes as a potential for conflict and must be resolved (correspondence with Park Manager Larry Taylor, 6/06). During the summer of 2011, the lake level receded nearly three feet due to drought conditions. The Homeowners Association demanded the State Park to operate the pumps to bring lake level to near pool stage, claiming that the lake was to be maintained at pool stage as per stated in homeowners contract. Pumping was initiated and continued until rainfall brought the level.

MANAGEMENT ISSUES

AQUATIC VEGETATION

Vegetation is limited primarily to *Potamogeton* species, alligator weed *Alternanthera philoxeroides* and water primrose *Ludwigia uruguayensis* in shallow areas around the shoreline. The high turbidity of the lake has limited the growth of submersed species thus far, although coontail *Ceratophyllum demersum*, southern naiad *Najas guadalupensis*, and hydrilla *Hydrilla verticillata* have been documented. Hydrilla was first observed during the 2006 type map (see below) only in northeast cove of the lake. It was soon treated with Aquathol Super K (granular endothall) at a 4 ppm rate or 30 lbs per surface acre. A total of 7.7 acres was treated. It has not been observed in the reservoir since the application. Water hyacinth *Eichhornia crassipes* has also been found in small patches along the shoreline in several locations around the lake. It has typically been treated with glyphosate (0.75 gals/acre) or 2,4-D (0.5 gals/acre) when outside of the waiver period of March 15 – Sept. 15.

Type Map

Type maps were completed in 2006 and 2010 and revealed minimal coverage of aquatic vegetation on Poverty Point Reservoir. No species were considered to be problematic or an impending threat. A copy is attached in **Appendix III**.

Treatment History by Year

Nuisance aquatic vegetation on Poverty Point has required infrequent control using herbicides. Emergent species such as alligator weed, water pennywort, and primrose have required the most effort, especially in some shallow coves. Treatments for these species have included glyphosate (0.75 gals/acre) or 2,4-D (0.5 gals/acre) when outside of the waiver period of March 15 – Sept. 15. In 2012, the herbicide Ecomazapyr (Imazapyr) was used for the first time for emergent control at a rate of 0.5 gals/acre. Water hyacinth, has required minimal control in the past. Treatments for water hyacinth include 2,4-D (0.5 gals/acre), though glyphosate (0.75 gals/acre) is used during the Louisiana Department of Agriculture waiver period. Aquathol Super K (granular endothall) was used in 2006 at a rate of 30 lbs./acre in an attempt to remove a small area of hydrilla. The application proved to be successful, as it is no longer found in the lake. A summary of vegetation requiring control with herbicide is shown in Table 1.

Table 1. Herbicide application history for Poverty Point Reservoir, 2005 - 2012.

YEAR	ACTION
2005	maintenance spraying of water hyacinth
2006	maintenance spraying of water hyacinth, primrose attempted eradication of hydrilla in northeast cove of lake by application of granular Aquathol®
2007	maintenance spraying of water hyacinth, primrose
2008	maintenance spraying of water hyacinth, primrose
2009	maintenance spraying: alligator weed (10 acres), water hyacinth (42 acres)
2010	no herbicide applications
2011	no herbicide applications
2012	maintenance spraying: alligator weed (29 acres), pennywort (5 acres), primrose (6 acres)

HISTORY OF REGULATIONS

Recreational

Black Bass (Largemouth *Micropterus salmoides* and Spotted *M. punctatus*)
April 2003 (opening of lake to angling): slot of 14" – 17", daily creel of 5 with 1 over the slot in effect.

Oct. 20, 2004 Largemouth Bass Slot Increase: The slot limit for bass was increased from 14" – 17" to 15" – 19" to protect faster growing bass and increase trophy potential. Creel remains 5 bass per day with 1 over the slot. This change in regulation was partly due to requests by bass anglers and comments originating from April 2004 public hearing. District 2 fisheries biologists agreed that this lake should be designated as a trophy lake by LDWF Inland Fisheries Guidelines as the bass in this lake have the potential for rapid growth to trophy size.

Crappie (Black *Pomoxis nigromaculatus* and White *P. annularis*)
April 2003 (opening of lake to angling): 50 fish creel, no size limit

Oct. 20, 2004 Crappie Creel Reduction- The crappie daily creel was reduced from 50 to 25 because of angler concerns of over harvesting and high angling pressure on a small new lake. These concerns were documented during the April 2004 public hearing, where most agreed on the new creel limit. A self-clearing creel survey performed during the winter of 2003-2004 revealed that most anglers were not harvesting over 25 fish.
In addition to public appeal, the creel was lowered to allow for a more equal distribution of what may be prove to be a limited resource with the high rate of angling on this lake.

January 2005- The following recreational gears were prohibited to preserve the recreational integrity of the state park: hoop nets, wire nets, yo-yo's, trotlines, and slat traps. This rule is defined in R.S. 56:410.10.

The 2013 recreational fishing regulations may be viewed at the link below:
http://www.wlf.louisiana.gov/fishing/regulations

Commercial
Commercial fish netting is prohibited.
The 2013 commercial fishing regulations may be viewed at the link below:
http://www.wlf.louisiana.gov/fishing/regulations

DRAWDOWN HISTORY

No Poverty Point Reservoir drawdowns have been conducted.

FISH KILLS/ DISEASE HISTORY/ LMBV

May 21, 2002 Fish Kill- An estimated 3,000 common carp *Cyprinus carpio* and 5,000 yellow bullhead *Ameiurus natalis* were found dead, bullhead were still dying. No other species were observed to be. Water quality was normal. Samples were sent to Dr. Hawke at LSU, who confirmed the kill was caused by fish-borne bacteria. The primary disease in both species was caused by the bacterium C*olumnaris spp.* The bullheads also had a secondary infection of septicemia caused by the bacterium A*eromonas spp*. There are high densities of both carp and bullhead in the lake. The kill was deemed to be a positive occurrence for the lake.

July 1, 2008 – common carp were collected by a pathologist from Warm Springs Fish Health Center as part of a broad based study on carp disease

CONTAMINANTS/ POLLUTION

Water quality
None performed by LDWF or LDEQ.

BIOLOGICAL

Fish samples

History – Standardized sampling was initiated in 2001.
Gear- The following is a summary of past and future sampling (Table 2).

Table 2. The historical, current and future scheduled fisheries sampling conducted on Poverty Point Reservoir, 2001 - 2015.

POVERTY POINT RESERVOIR SAMPLING	
Note: All sampling conducted as per LDWF Standardized Sampling Guidelines.	
2001	Electrofishing: (6)15 minute samples in fall. *Note: 15 minutes is not the total time required for the sample. LDWF electrofishing samples are defined as 900 seconds of time that electricity is actually being applied into the water. In addition, other parameters such as sampling equipment, time of day, time of year and sample site are all consistent.* Frame/Lead Nets: 5 sets during fall. *Note: 1 set consists of a frame net and 4 lead nets of the following mesh sizes fished simultaneously in same area: 0.5", 1.0", 1.5", and 2.0". Nets fish for 48 – 96 hrs.*
2002	Electrofishing: (6)15 minute samples spring and fall
2003	Electrofishing: (6)15 minute samples spring and fall Lead Nets: 6 sets during fall. Self Clearing Permit Creel Survey: initiated in fall
2004	Electrofishing: (6)15 minute samples spring and fall Shoreline seining: 4 stations during summer. *Note: a seine sample is defined as a minimum of a 1 quadrant of a circle haul at each location.* Lead Nets: 5 sets during fall Self Clearing Permit Creel Survey: Jan. – April.
2005	Electrofishing: (6)15 minute samples spring and fall Recreational Angler Survey: 6 surveys / month – 12 months Gill Nets: 6 sets during winter. *Note: a gill net set consists of 4 gill nets of the following mesh sizes fished simultaneously in the same area: 2.5", 3.0", 3.5", and 4.0". Nets fish for 24 hrs.*
2006	Electrofishing: (6)15 minute samples spring and fall Aquatic Type Map: summer (lakewide) Lead Nets: 5 stations during fall
2007	Electrofishing: (6) 15 minute samples spring and fall Lead Nets: 5 stations during fall Catfish Sampling during fall: gear not yet determined

2008	Electrofishing: (6) 15 minute samples spring and fall Lead Nets: 5 stations during fall Gill Nets: 6 stations during winter Recreational Angler Survey: 6 surveys/month – 12 months
2009	Electrofishing: (6) 15 minute samples spring and fall Aquatic Type Map: summer (lakewide) Crappie Tagging Study: approx. 250 crappie will be tagged to determine angler exploitation Recreational Angler Survey in Conjunction with Crappie Tagging Study: 6 surveys/month Jan.-May and Oct.-Dec.
2010	Electrofishing: (6) 15 minute samples spring and fall Lead Nets: 7 stations during fall Mortality Study: Year 1 (largemouth bass and crappie age/growth, largemouth bass genetics)
2011	Electrofishing: (6) 15 minute samples spring and fall Lead Nets: 6 stations during fall Mortality Study: Year 2 (largemouth bass and crappie age/growth, largemouth bass genetics) Gill Nets: 3 stations during winter
2012	Electrofishing: (6) 15 minute samples spring and fall Lead Nets: 6 stations during fall Mortality Study: Year 3 (largemouth bass and crappie age/growth, largemouth bass genetics)
2013	No Sampling
2014	Electrofishing: (6) 15 minute samples spring and fall Gill Nets: 3 stations during winter
2015	Lead Nets: 6 stations during fall

Lake records

No official records are kept, though the State Park weighs and documents large fish caught. Reportedly, a 13 lb largemouth bass, a 15 lb. channel catfish, a 33 lb. blue catfish, a 3.8 lb black crappie (currently no. 1 on state record list), and a 3.25 lb. white crappie (currently tied for no. 3 on state record list) have been the largest of these species documented in Poverty Point as of Feb. 20, 2013. See attached link:
http://www.laoutdoorwriters.com/Records/LouisianaFishRecords/tabid/87/Default.aspx

Stocking History

Poverty Point pre-impoundment waters included two farm ponds; borrow pits, and two Bayou Macon oxbows. Fish were removed from pre-impoundment waters in the summer of 1997. Stocking was initiated in November, 1997. Species stocked thus far include Florida largemouth bass, both native and copper nose bluegill *Lepomis macrochirus*, redear sunfish *L. microlophus*, channel catfish, and black crappie.

Table 3. The stocking history of Poverty Point Reservoir, LA 1997 – 2012.

Date	Species	Size	Number	Notes
Nov. '97	Redear Sunfish Sun.	adults	96	1 acre pond near office
Nov. '97	Redear Sunfish	fingerlings	167,379	1 acre pond near office
April '98	FLMB	adults	226	pre-impoundment waters
Nov. '98	Bluegill	fingerlings	14,085	north oxbow
Nov. '98	Coppernose Bluegill	fingerlings	16,480	south oxbow
March '99	FLMB	fry	100,000	
May '99	Bluegill	2.5"	660	bar pit near dam
May '99	Bluegill	6"	222	bar pit near dam
Feb. '01	Bluegill	fingerlings	116,072	
April '01	FLMB	1"	100,800	Tyler x Tyler
May '01	FLMB	1"	215,302	Crl x Crl
April '02	Black crappie	68/lb	12,871	
April '02	FLMB	fingerlings	274,521	
April '03	FLMB	fry	224,413	133 lbs
Oct. '03	Channel catfish	fingerlings	25,896	
March '04	Channel catfish	adult	40	Monroe hatchery
April '04	FLMB	fingerlings	282,162	
Oct. '04	Channel catfish	fingerlings	52,180	
April '05	FLMB	fingerlings	129,475	
May '05	FLMB	fingerlings	152,499	
Spring '06	FLMB	fingerlings	125,800	
Spring '07	FLMB	fingerlings	132,580	
Spring '08	FLMB	fingerlings	139,600	
Spring ‘09	FLMB	fingerlings	148,441	
Fall ‘09	FLMB	Phase II	2,727	
Spring ‘10	FLMB	fingerlings	4,095	
Spring ‘11	FLMB	fingerlings	50,994	
Fall ‘11	FLMB	Phase II	1,006	
Spring ‘12	FLMB	fingerlings	50,042	

Scheduled Fish Stockings

-Largemouth Bass- Stocking rate for fingerlings has been 50 FLMB fingerlings/ per surface acre through 2009. There are an estimated 1,000 acres of suitable bass habitat in Poverty Point Reservoir. In 2011, the stocking rate for fingerlings became based on acres of suitable bass habitat rather than total surface acres.

Genetic samples showed a steady increase in the presence of the Florida gene from 27% to 56% over the period of 2003 to 2008. There is also no influence of native bass populations from upstream or border waters in Poverty Point Reservoir.

-Other Species – Stockings for most fish are considered to be successful when a self-sustaining population is attained. Such is the case in Poverty Point. No current evidence indicates a need for additional species.

Species profile

A post impoundment list of fishes sampled is found in **Appendix IV**.

Genetics

Only the Florida strain of largemouth bass has been stocked into Poverty Point Reservoir. Stocking was initiated in 1998 after the pre-impoundment waters were treated with rotenone to remove the existing fish population. It is believed that northern largemouth bass were introduced into the reservoir during the initial filling through pumping from the adjacent Bayou Macon. Genetic sampling began in 2001 and will continue annually to monitor the influence of stocking. Samples showed a steady increase in the presence of the Florida gene from 27% to 57% over the period of 2003 to 2011.

Results of recent samples are shown below in Table 4.

Table 4. Genetic composition of largemouth bass samples from Poverty Point Reservoir, 2009 – 2011.

Year (n)	% Florida	% Hybrid	% Northern
2009 (74)	17.5%	40.5%	42.0%
2010 (256)	15.4%	26.0%	58.6%
2011 (268)	15.0%	42.0%	43.0%

Threatened/endangered/exotic species

No fish species sampled.

CREEL

The objective of a creel survey is to determine a relative index of fishing pressure, catch, harvest, success, and which species anglers preferred.

Historic Information/Type

September 2003 through March 2004 Self Clearing Creel - interview forms given to anglers entering state park were to be placed in box when done fishing and forms completed. Anglers were asked how long they fished, species fished for, number kept and released, and whether released bass were in the slot limit.

2005 Recreational Angler Survey - This creel survey was an access point survey designed to provide monthly estimates of total catch, harvest, length frequency of the harvest, and release by species. State Parks provided the number of vehicles entering each access site each month. Surveys were performed 6 days a month at either of the 2 ramps.

Dates and ramps were selected randomly, with 4 of the days per month being on weekends. All anglers completing a fishing trip were interviewed over a 5 hour period in either the morning or evening. Anglers were asked what species they fished for, how long they fished, how many they caught, how many they kept, and how far they drove. Ten fish of each species were randomly selected from each creel to measure total length.

2008 Recreational Angler Survey – same as 2005 survey, except only 3 surveys were conducted per month from October - December

2009 Recreational Angler Survey in Conjunction with Crappie Tagging Study – survey similar to previous (described above), but questions pertaining to crappie regulations were be asked of all crappie anglers. Only crappie will be measured

2012 Recreational Angler Survey in Conjunction with the 3-Year Mortality Study – 6 surveys conducted per month at either of the 2 boat launches, with monthly frequency influenced by estimated launch use. Information gathered was identical to the 2005 survey. The data will be used to assess the angling mortality component for the mortality study.

HYDROLOGICAL CHANGES

None

WATER USE

Water Supply

One original purpose of the reservoir was water supply for the town of Delhi and neighboring communities. It was stated to have the ability to supply 65 million gallons of water monthly for residential and commercial usage. The reservoir has not yet been used for this purpose.

Recreational Use

1. Hunting: not permitted
2. Skiing: allowed in designated area
3. Scuba Diving: not suitable (murky water)
4. Swimming: allowed at State Park beach
5. Boating

Irrigation

Only residential lawn irrigation allowed. No restrictions are currently in place.

APPENDIX I.

(return to Association)

Poverty Point Reservoir District, Board of Commissioners

Post Office Box 811
Delhi, LA 71232
(318) 878-8572

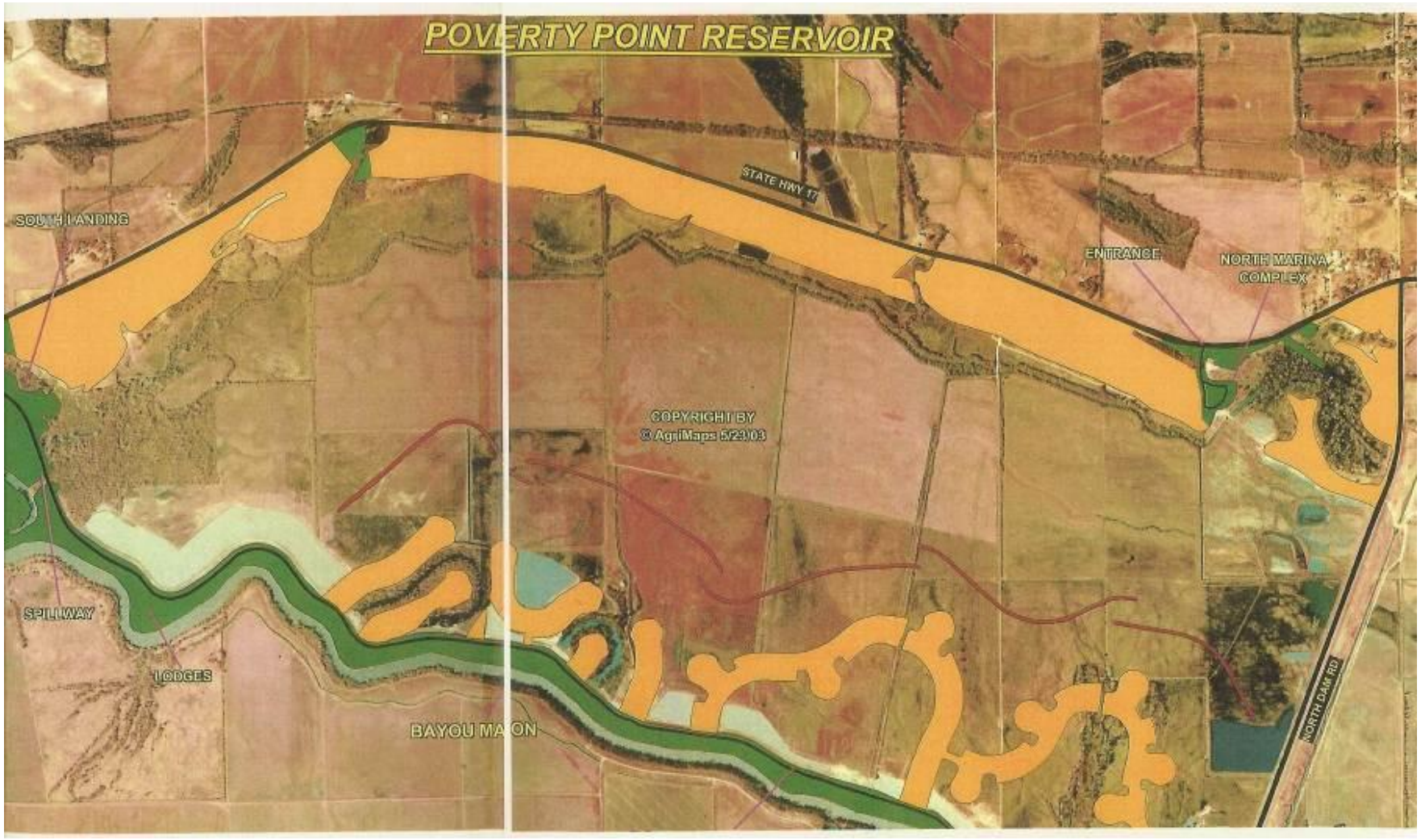
Members shall be appointed by the Governor from a list of nominees submitted by the governing authority of Richland, Madison, East & West Carroll Parishes; 5 members shall be appointed at the discretion of the governor, 2 of whom shall be minorities.

(created by R.S. 38:3087.1)

Armstrong, Sylvia	**723 Riverside Drive Lake Providence, LA 71254**	**(318) 559-2158**	**8/21/2000**
Doughty, David	**Rt 3 Box 123 Rayville, LA 71269**	**(318) 728-2401**	**8/21/1996**
Eiland Jr., Ed	**112 Robin Hood Lane Delhi, LA 71232**	**(318) 878-5857**	**8/21/1998**
Gammill, Mike	**P.O. Box 136 Oak Grove, LA 71263**	**(318) 428-4431**	**8/21/1996**
Martin, Mike President	**107 Greenwood Place Delhi, LA 71232**	**(318) 878-2663**	**8/21/1998**
May, Cleophas	**P.O. Box 81 Delhi, LA 71232**	**(318) 878-2615**	**2/19/1998**
Morse, James	**1216 Desoto Tallulah, LA 71282**	**(318) 574-4319**	**8/21/2000**
Thompson, Brant L	**Rt 1. Box 246 Delhi, LA 71232**	**(318) 878-9600**	**8/21/1998**

APPENDIX II. Poverty Point Reservoir Map

(return to Access)



Appendix III

(return to Type Map)

Type Maps

Type map of 2006

Poverty Point Reservoir in Richland Parish was surveyed for aquatic vegetation by Inland Fisheries personnel Ryan Daniel and Randy Lively on August 30, 2006. Species composition, abundance, and location were determined by travelling the entire shoreline by boat. The lake was approximately 15 inches below normal pool stage.

Submersed species identified included:
- southern naiad *Najas guadalupensis*
- coontail *Ceratophyllum demersum*
- hydrilla *Hydrilla verticillata*

The following emergent and floating species were also identified during the survey:
- alligator weed *Alternanthera philoxeroides*
- American pondweed *Potamogeton nodosus*
- water primrose *Ludwigia uruguayensis*
- water hyacinth *Eichhornia crassipes*

The vast majority of both the submersed and emersed species were found in the numerous coves and areas protected by wind breaks around the lake. Almost all of the vegetation was restricted to within 10 ft. of the shoreline, probably due to the high turbidity of the water. The main lake area, which is subject to severe wind and wave action, is mostly void of vegetation. Water primrose was the most common species present and was found in many of the coves on the west side of the lake. American pondweed was also abundant, especially on the east side of the lake and along the windbreaks. A few of the coves had a fringe of southern naiad extending out 5 ft. from the shoreline. Coontail was found mixed with other species in several locations but rarely forming pure stands. Isolated sprigs were observed scattered throughout many coves. Alligatorweed was mixed with the primrose in several locations, but these 2 species were not at excessive amounts. There was no vegetation present in areas where rocks had been placed to control bank erosion.

Poverty Point Reservoir
Vegetation Type Map
August 30, 2010

A type map survey of Poverty Point was conducted on 8/31/10 by LDWF Inland Fisheries biologists Ryan Daniel and Kane Finkbeiner. A boat was used to travel the entire shoreline with observations recorded on a map and notebook and locations marked by GPS. Current lake level was approximately 82.0 ft., which is 1.2 ft. below pool stage.

Vegetation was mostly restricted to the shorelines of the protected coves of the lake. Almost none was found on the main lake shoreline or around the windbreaks. Alligatorweed *Alternanthera philoxeroides* and water primrose *Ludwigia uruguayensis* are the most common species in the lake and are restricted to the immediate shoreline, rarely growing over 10 ft. from the shoreline. Most of the coves had moderate coverage of these species. Coontail *Ceratophyllum demersum* and southern naiad *Najas guadalupensis* were the only submerged aquatic species observed. Coontail was present in the coves at the south boat ramp and at the marina on the north end of the lake, while naiad was only seen in a cove near the marina. In most areas, the coontail was growing to depths of only 1 ft., but was found in depths up to 3 feet in a cove near the marina. The only floating species observed was duckweed *Lemna minor,* which was only found interspersed with alligator weed or primrose and considered insignificant. A few small patches of American pondweed *Potamogeton nodosus* were observed near the south boat ramp and a cove near the marina. Much of the American pondweed near the south ramp was completely out of the water due to the low water level. A yet-to-be identified emergent (similar to water willow with opposite leaves and white flowers on a terminal spike) was abundant on some the shoreline near the marina. Other species listed below but not previously mentioned were present but not in significant amounts. See attached "field notes" and map for more detailed description of vegetation locations and coverage.

SPECIES LIST

- Alligator weed *Alternanthera philoxeroides*
- American pondweed *Potamogeton nodosus*
- Coontail *Ceratophyllum demersum*
- Duckweed *Lemna minor*
-Duck potato *Sagittaria latifolia*
-Pennywort *Hydrocotyle sp.*
- Southern naiad *Najas guadalupensis*
- Water primrose *Ludwigia uruguayensis*

Submerged vegetation continues to be very limited in Poverty Point. This is most likely due to the turbid conditions and wind action. Developed areas of the shoreline, where sea-walls and rip-rap have been constructed are mostly void of vegetation. Neither hydrilla *Hydrilla verticillata* nor water hyacinth *Eichhornia crassipes,* which were both present during the 2006 type map survey, were observed in 2010. Both of these species had been treated with herbicides in past years. Currently, vegetation is causing no problems in the lake, nor are there any species to cause concern, although there are 2 large mats of alligatorweed covering nearly

an acre of shallow water in the back of the cove at the State Park manager's residence on Hwy. 17. There is no need to treat this area, as it probably provides needed cover for small fish. Coverage of American pondweed was less than in 2006, but this may partially have been a result of the hydrilla control. There was significant coverage of this species a few years ago, but now it is insignificant. This should be noted since American pondweed can provide needed shallow cover for fish in the absence of true submerged species.

APPENDIX IV.

(return to species)

Post-Impoundment Fish Species Documented in Poverty Point Reservoir From Standardized Sampling Initiated November 2001

AMIIDAE (Bowfin Family)

Bowfin, *Amia calva* (Linnaeus)

ATHERINIDAE (Silverside Family)

Brook Silverside, *Labidesthes sicculus* (Cope)

CATOSTOMIDAE (Sucker Family)

Smallmouth Buffalo, *Ictiobus bubalus* (Rafinesque)
Bigmouth Buffalo, *Ictiobus cyprinellus* (Valenciennes)
Black Buffalo, *Ictiobus niger* (Rafinesque)

CENTRARCHIDAE (Sunfish Family)

Bluegill, *Lepomis macrochirus* (Rafinesque)
Black Crappie, *Pomoxis nigromaculatus* (Lesueur)
White Crappie, *Pomoxis annularis* (Rafinesque)
Largemouth Bass, *Micropterus salmoides* (Lacepede)
Redear Sunfish, *Lepomis microlophus* (Gunther)
Warmouth, *Lepomis gulosus* (Cuvier)

CLUPEIDAE (Herring Family)

Gizzard Shad, *Dorosoma cepedianum* (Lesueur)
Threadfin Shad, *Dorosoma petenense* (Gunther)

CYPRINIDAE (Minnow Family)

Common Carp, *Cyprinus carpio* (Linnaeus)
Golden Shiner, *Notemigonus crysoleucas* (Mitchill)
Bullhead Minnow, *Pimephales vigilax* (Baird and Girard)

ICTALURIDAE (Freshwater Catfish Family)

Channel Catfish, *Ictalurus punctatus* (Rafinesque)
Yellow bullhead, *Ameiurus natalis* (Lesueur)
Black bullhead, *Ameiurus melas* (Rafinesque)
Blue Catfish, *Ictalurus furcatus* (Rafinesque)

LEPISOSTEIDAE (Gar Family)

Spotted Gar, *Lepisosteus oculatus* (Winchell)
Longnose Gar, *Lepisosteus osseus* (Linnaeus)

Appendix III cont'd.

POECILIIDAE (Livebearer Family)
Mosquitofish, *Gambusia affinis* (Baird and Girard)

MORONIDAE (Temperate Bass Family)

White Bass, *Morone chrysops* (Rafinesque)
Yellow Bass, *Morone mississippiensis* (Jordan and Eigenmann)

SCIAENIDAE (Drum Family)

Freshwater Drum, *Aplodinotus grunniens* (Rafinesque)